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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,620	10/24/2003	Aiping Huang	CS22507RL	8802

20280 7590 04/19/2006

MOTOROLA INC  
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EXAMINER

VU, TRISHA U

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/692,620

Applicant(s)

HUANG, AIPING

Examiner

Trisha Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input checked="" type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. Claims 1-7 are presented for examination.

#### *Drawings*

2. The new drawing filed 04-19-04 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: note Fig. 2, element 102 "PC USB HUB" introduce new matter into the disclosure of the invention.

Applicant is required to cancel the new matter in the reply to this Office Action.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moran et al. (US Pub. No. 2004/0157638) (hereinafter Moran) in view of Universal Serial Bus Specification, Revision 2.0, April 27, 2000 (hereinafter USB Specification).

As to claim 1, Moran teaches a Universal Serial Bus device (telephone device 108 as shown in Fig. 2A or 920 as shown in Fig. 9) comprising: a first processor (CPU 926) to provide a first set of services (e.g. telephone services) to an external host (host

computer 102); and a second processor (CPU 924), coupled to said first processor and coupled to a Universal Serial Bus device connector (USB connector 922) suitable for connection to said external host, configured to provide a second set of services (e.g. controlling one or more flash memory modules 906) to said external host, and configured to pass service data bi-directionally between said first processor and said external host for said first set of services (at least Fig. 9 and paragraphs [0105-0109] and [0179-0180]). Moran teaches USB communication through out his invention (e.g. Figs. 1-2, 8-10). However, Moran does not explicitly disclose the type of connection between the first processor 926 and the second processor 924 within USB device 920 being USB connection, wherein one processor connected to another processor as a USB host. USB Specification teaches USB communication and the motivation to implement USB (at least pages 1-2 and 27-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement USB connection between the first processor and the second processor as taught by USB Specification in the system of Moran because USB provides so many advantages including fast, bidirectional, isochronous, and low cost communication (page 1). Also USB Specification teaches USB host and USB device (pages 27-28) wherein USB host controls all access to the USB (page 27) and USB device provides additional functionality to the host (page 28). And since processor 924 is directly connected to external host 102 for receiving commands/messages for the telephone device 920. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

implement processor 924 to be USB host as suggested by USB Specification in the system of Moran to control access to the USB between processor 924 and processor 926.

As to claim 3, Moran further teaches the USB device further comprising a wireless transceiver (paragraphs [0130] and [0162]).

As to claim 4, Moran further teaches said second processor is further configured to transmit a de-configuration request to said first processor in response to at least one of a physical disconnection of said external host and a service disconnect message from said external host (proper disconnection requires a user to indicate impending disconnection to host 102 and/or telephone 108 (e.g., via the telephone or host interface)) (paragraph [0113]), and wherein said first processor is further configured to cancel at least one service in response to said de-configuration request (this is inherent due to disconnection, the service(s) provided by the first processor is canceled).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moran et al. (US Pub. No. 2004/0157638) (hereinafter Moran) in view of Universal Serial Bus Specification, Revision 2.0, April 27, 2000 (hereinafter USB Specification) and further in view of Lin (6,654,841).

As to claim 2, the argument above for claim 1 applies. However, Moran and USB Specification do not explicitly disclose said first processor is further configured to have a plurality of normally open logical service switches, wherein said first set of services are unavailable to said second processor during bus enumeration from said first processor to said second processor, and wherein at least one of said plurality of normally open logical

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service switches will close with respect to at least one of said first set of services in response to a request by said second processor. Lin teaches USB device (Fig. 1) having processor (microcontroller 1) configured to have a plurality of normally open logical service switches (semiconductor switch 4), wherein the processor's services are unavailable to host during bus enumeration (the functions are shifted based on different trigger position) (col. 1 lines 63-65), and wherein at least one of said plurality of normally open logical service switches will close with respect to at least one of said first set of services (col. 2 line 25 to col. 3 line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the processor with logical service switches as taught by Lin in the system of Moran and USB Specification to provide services of flash memory even if no flash memory card is available (col. 1 lines 9-14).

### *Response to Arguments*

5. Applicant's arguments, regarding "*The Moran et al. publication does not describe or suggest any type of USB connection among components of the telephone 920... so the CPU 924 does not describe or suggest one processor connected to another processor as a USB host, as required by claim 1*" have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of additional reference(s). Since Moran is silent with regard to the type of connection between CPU 924 and CPU 926, and USB Specification teaches USB communication type and suggests the motivation to implement USB, thus the rejection set forth above is proper.

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*Allowable Subject Matter*


6. Claims 5-7 are allowed. A statement of reasons for the indication of allowable subject matter had been provided in the previous Office Action.

*Conclusion*

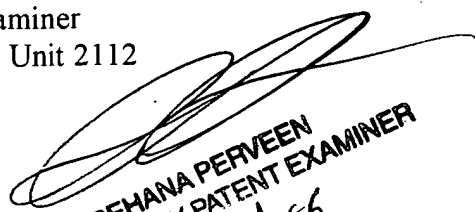
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trisha Vu whose telephone number is 571-272-3643. The examiner can normally be reached on Mon-Thur and alternate Fri 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Trisha Vu  
Examiner  
Art Unit 2112

uv

  
REHANA PERVEEN  
SUPERVISORY PATENT EXAMINER  
4/14/06